

### **Listing of Claims:**

1. (Withdrawn) A lighting system comprising:  
a source of high-frequency power having a high-frequency output;  
an interconnecting cord comprising a pair of output conductors enclosed in a common insulating sheath;  
said interconnecting cord being connected to the high-frequency output;  
an assembly having a pair of input terminals, a high-frequency ballasting circuit, an enclosure and a lamp socket capable of receiving and supporting a lamp;  
the lamp socket having lamp socket terminals;  
said enclosure completely enclosing the ballasting circuitry, the interconnecting wiring between the input terminals and the ballasting circuitry, the interconnecting wiring between the ballasting circuitry and the lamp socket, and the lamp socket terminals; and  
said enclosure not enclosing a gas-discharge lamp.
2. (Withdrawn) The system described in claim 1, wherein the maximum power available from high-frequency output does not exceed 100 watts.
3. (Withdrawn) The system described in claim 1, wherein the maximum volt-amperes available from the high-frequency output does not exceed 100.
4. (Withdrawn) The system described in claim 1, wherein the high-frequency output is connected to a pair of high-frequency output terminals; and  
the maximum RMS voltage between the pair of output conductors does not exceed 100 volts.
5. (Withdrawn) The system described in claim 1, wherein the high-frequency output is connected to a pair of high-frequency output terminals; and  
the maximum RMS voltage between the pair of output conductors does not exceed 43 volts.

6. (Withdrawn) The system described in claim 1, wherein a reflector is used with the assembly; and  
said reflector is located between the assembly and the underside of the cabinet or shelf.
7. (Withdrawn) The assembly described in claim 1, wherein a diffuser or lens is provided  
between the lamp and the surface being illuminated.
8. (Withdrawn) The system described in claim 1, wherein the assembly contains two  
lamp sockets;  
said lamp sockets having openings for receiving and powering a single-ended lamp; and  
said openings facing in opposite directions.
9. (Withdrawn) The system described in claim 1, wherein the assembly contains two  
lamp sockets;  
said lamp sockets having openings for receiving and powering a single-ended lamp; and  
said openings facing in opposite directions and the openings are located on substantially  
the same axis.
10. (Withdrawn) The system described in claim 1, wherein a power level selection  
capability is provided within said assembly;  
the assembly being provided with a socket for power level selection; and  
the power level of the luminaire being selected by inserting a plug into said socket or  
by changing the location of a plug assembly within the socket.
11. (Withdrawn) The system described in claim 1 wherein said pair of input terminals is  
capable of piercing said common insulting sheath of the pair of output conductors  
during the installation process of the luminaire, each input terminal making  
electrical contact with a different conductor.
12. (Withdrawn) The system described in claim 11 wherein the assembly can be installed  
at any location, along the length of the pair of output conductors.

13. (Withdrawn) The system described in claim 11 wherein multiple assemblies can be installed at any location, along the length of the pair of output conductors.
14. (Withdrawn) The system described in claim 11, wherein the luminaire can be connected to the pair of output conductors in any one of four possible orientations relative to the pair of output conductors.
15. (Withdrawn) An assembly for installation under a cabinet or shelf;  
said assembly including a pair of high-frequency input terminals, a high-frequency ballasting circuit, an enclosure and a lamp socket for a single-ended lamp;  
said enclosure completely enclosing the high-frequency ballasting circuitry, the interconnecting wiring between the high-frequency input terminals and the high-frequency ballasting circuit, and the interconnecting wiring between the high-frequency ballasting circuit and the lamp socket for a single-ended lamp; and  
said enclosure not enclosing the single ended lamp.
16. (Withdrawn) The assembly described in claim 15 wherein, said enclosure also encloses a second lamp socket for a single-ended lamp.
17. (Withdrawn) The assembly described in claim 15, wherein a reflector is used with the assembly; and  
said reflector being installed between the assembly and the underside of the cabinet or shelf.
18. (Withdrawn) The assembly described in claim 15, wherein a diffuser or lens is added between the lamp and the surface being illuminated.
19. (Withdrawn) An arrangement suitable for mounting to a mounting surface comprising: a pair of input terminals, a ballasting circuit, a socket with output

terminals that is capable of receiving, supporting and making electrical connection to a single-ended lamp, and an enclosure;  
the input to the ballasting circuit being connected to the pair of input terminals;  
the output of the ballasting circuit being connected to the output terminals within the socket;  
the ballasting circuit being capable of properly igniting and powering a gas discharge lamp when provided with high-frequency power on the pair of input terminals;  
the enclosure completely encapsulating the ballasting circuitry, the interconnection between the input terminals and the ballasting circuitry, the interconnection between the ballasting circuitry and the output terminals of the socket, and the portion of the output terminals to which the ballasting circuitry connects; and  
said enclosure not enclosing a single-ended lamp.

20. (Withdrawn) The arrangement described in 19, wherein the ballasting circuit is capable of properly igniting and powering a gas discharge lamp when provided with high-frequency power on the pair of input terminals that is power limited to 100 watts.

21. (Withdrawn) The arrangement described in claim 19, wherein the ballasting circuit is capable of properly igniting and powering a gas discharge lamp when provided with high-frequency power on the pair of input terminals; and  
said high-frequency power is limited to a reactive power of 100 volt-amperes or less.

22. (Withdrawn) The arrangement described in claim 19, wherein the maximum RMS voltage between the pair of input terminals does not exceed 100 volts.

23. (Withdrawn) The arrangement described in claim 19, wherein a reflector is used with said arrangement; and  
said reflector being installed between the enclosure and the underside of the cabinet or shelf.

24. (Withdrawn) The arrangement described in claim 19, wherein a diffuser or lens is added between the lamp and the surface being illuminated.
25. (Withdrawn) The arrangement described in claim 19, wherein the arrangement contains two lamp sockets;  
said lamp sockets having openings for receiving and powering a single-ended lamp; and  
said openings facing in opposite directions.
26. (Withdrawn) The arrangement described in claim 19, wherein the arrangement contains two lamp sockets;  
said lamp sockets having openings for receiving and powering a single-ended lamp; and  
said openings facing in opposite directions and the openings are located on substantially the same axis.
27. (Withdrawn) The arrangement described in claim 19, wherein a power level selection capability is included; and  
the power level of the luminaire being selected by inserting or moving the location of a plug assembly.
28. (Withdrawn) A high-frequency ballasting circuit comprising: a pair of input terminals, a capacitor, a transformer, and an inductor;  
the transformer having a primary winding, multiple low voltage secondary windings and a high voltage secondary windings;  
the capacitor being connected in series between one of the input terminals and the primary winding of the transformer;  
the low voltage secondary windings being suitable for powering the cathodes of a gas-discharge lamp;  
the high voltage secondary winding being suitable for connection across a gas-discharge lamp;  
the high voltage secondary proving sufficient voltage to ignite a gas-discharge lamp;  
the lamp current being limited by the capacitor in series with the input terminal and the primary winding; and

the circuit arrangement resulting in a reduction of voltage across the cathodes after the gas discharge lamp has ignited.

29. (Withdrawn) An assembly for installation under a cabinet or shelf;  
said assembly including a pair of high-frequency input terminals, a high-frequency ballasting circuit, a lamp socket for a single-ended lamp, interconnecting wiring between the high-frequency input terminals and the high-frequency ballasting circuit, interconnecting wiring between the high-frequency ballasting circuit and the lamp socket for a single-ended lamp, and an enclosure;  
said high-frequency input terminals being provided with a high-frequency current;  
said high-frequency current having a frequency greater than 10,000 Hertz;  
said enclosure completely enclosing the high-frequency ballasting circuitry, the interconnecting wiring between the high-frequency input terminals and the high-frequency ballasting circuit, and the interconnecting wiring between the high-frequency ballasting circuit and the lamp socket for a single-ended lamp; and  
said enclosure not enclosing a single-ended lamp.

30. (Withdrawn) The assembly described in claim 29 wherein, said enclosure also includes a mounting base;  
said ballasted socket assembly also provided with a channel;  
the high-frequency input terminals being located within said channel; and  
said mounting base having holes capable of receiving screws whereby the ballasted socket assembly is mounted directly to the underside of a cabinet or shelf.

31. (Withdrawn) An arrangement comprising: a pair of input terminals, a ballasting circuit, a socket with output terminals that is capable of receiving, supporting and making electrical connection to a single-ended lamp, interconnecting wiring between the input terminals and the ballasting circuitry, interconnecting wiring between the ballasting circuitry and the output terminals of the socket and an enclosure;  
the input to the ballasting circuit being connected to the pair of input terminals;

the output of the ballasting circuit being connected to the output terminals within the socket;  
the ballasting circuit being capable of properly igniting and powering a gas discharge lamp when provided with a high-frequency voltage on the pair of input terminals;  
the enclosure completely encapsulating the ballasting circuitry, the interconnecting wiring between the input terminals and the ballasting circuitry, the interconnecting wiring between the ballasting circuitry and the output terminals of the socket, and the portion of the output terminals to which the ballasting circuitry connects; and  
said enclosure not enclosing a single-ended lamp.

32. (Withdrawn) The arrangement described in claim 31 wherein, said enclosure is provided with a channel; and  
the input terminals are located within said channel.

33. (Original) A high-frequency under-cabinet lighting system comprising: a high-frequency power source, an interconnecting cable, and multiple luminaires;  
the high-frequency power source being connected to and powered from a standard utility power line and having a high-frequency power output;  
the interconnecting cable being connected to said high-frequency power output;  
said interconnecting cable not being a track of a track lighting system;  
the interconnecting cable being supplied from a manufacturing facility with no luminaires connected thereto; the system further characterized in that the system is installed by an installer;  
during installation, luminaires are connected to a single interconnecting cable at multiple points along the interconnecting cable using an insulation-displacement connection; and  
the locations of the luminaires being determined by the installer.

34. (Original) A method of providing under-cabinet lighting, comprising the steps of:  
passing a high-frequency output cord along the bottom of a cabinet or a shelf,

placing a ballasted socket assembly over the high-frequency output cord,  
positioning a channel provided in the ballasted socket assembly directly over the high-frequency output cord, and  
mounting the ballasted socket assemblies to the under side of the cabinet or shelf.

35. (Original) The process described in claim 34, additionally characterized by including the step of positioning a reflector between the ballasted socket assembly and the bottom of the cabinet or shelf.

36. (Original) The process described in claim 34, additionally characterized by including the step of orienting the ballasted socket assembly in one of four possible orientations.

37. (Original) The process described in claim 34, additionally characterized by including the step of piercing the insulation of the high-frequency output cord with an insulation displacement connector.

38. (Currently amended) A high-frequency under-cabinet lighting system comprising: a high-frequency power source, an interconnecting cable, and multiple luminaires; the interconnecting cable being supplied with no luminaires connected there to; and the system further characterized in that multiple luminaires can be powered from the same interconnecting cable without ~~cutting~~severing the interconnecting cable.

39. (Currently amended) A luminaire suitable for connection to and being powered from a high-frequency power source by way of an interconnecting cord;  
the interconnecting cord comprising a first electrical conductor and a second electrical conductor encased within and separated from one another by a common insulating sheath;  
the luminaire including two channels intersecting at right angles;  
either channel being capable of receiving said interconnecting cord;  
the luminaire also including a first input terminal and a second input terminal;  
the input terminals being designed to pierce the insulation of the interconnecting cord;  
and



the input terminals being located within the area of the intersection of the two channels and positioned[[,]] such that[[,]] the first input terminal making contact with a first electrical conductor and the second input terminal making contact with the second electrical conductor during the installation of the luminaire no matter through which channel the electrical cord is routed.

40. (Original) The luminaire described in claim 39, wherein the luminaire can be mounted in place prior to the insertion of the interconnecting cord.
41. (Original) The luminaire described in claim 39, wherein the interconnecting cord is installed in place under the cabinet or shelf before the luminaire is mounted in place under the cabinet or shelf.
42. (Original) The luminaire described in claim 39, wherein multiple luminaires can be connected to the same interconnecting cord.
43. (Original) The luminaire described in claim 39, wherein the luminaire can be connected to the interconnecting cord in any one of four possible orientations.
44. (Original) The luminaire described in claim 39, wherein the input terminals have a circular or oval cross-section.
45. (New) The luminaires described in claim 33, wherein the luminaires can be mounted in place prior to the insertion of the interconnecting cable.
46. (New) The luminaires described in claim 33, wherein the interconnecting cable is installed in place under the cabinet or shelf before the luminaires are mounted in place under the cabinet or shelf.
47. (New) The luminaires described in claim 33, wherein the luminaires can be relocated along the interconnecting cable.

48. (New) The luminaires described in claim 33, wherein the luminaires can be connected to the interconnecting cable in any one of four possible orientations.
49. (New) The luminaires described in claim 33, wherein the input terminals have a circular or oval cross-section.
50. (New) The luminaires described in claim 33, wherein the input terminals have a flat cross-section.
51. (New) The luminaires described in claim 33, wherein the luminaires include a ballasting circuit capable of powering at least one gas-discharge lamp.
52. (New) The luminaires described in claim 51, wherein the at least one gas-discharge lamp is a single-ended gas-discharge lamp.
53. (New) The luminaires described in claim 51, wherein the ballasting circuit includes an arrangement capable of changing the power level provided to the at least one gas-discharge lamp.
54. (New) The luminaires described in claim 38, wherein the luminaires can be mounted in place prior to the connection to the interconnecting cable.
55. (New) The luminaires described in claim 38, wherein the interconnecting cable is installed in place under the cabinet or shelf before the luminaires are mounted in place under the cabinet or shelf.
56. (New) The luminaires described in claim 38, wherein the luminaires can be relocated along the interconnecting cable.
57. (New) The luminaires described in claim 38, wherein the luminaires can be connected to the interconnecting cable in any one of four possible orientations.

58. (New) The luminaires described in claim 38, wherein the luminaires have input terminals; and the input terminals have a circular or oval cross-section.
59. (New) The luminaires described in claim 38, wherein the luminaire have input terminals; and the input terminals have a flat cross-section.
60. (New) The luminaires described in claim 38, wherein the luminaires include a ballasting circuit capable of powering at least one gas-discharge lamp.
61. (New) The luminaires described in claim 60, wherein the at least one gas-discharge lamp is a single-ended gas-discharge lamp.
62. (New) The luminaires described in claim 60, wherein the ballasting circuit includes an arrangement capable of changing the power level provided to the at least one gas-discharge lamp.
63. (New) A high-frequency under-cabinet lighting system comprising: a high-frequency power source, an interconnecting cable, and multiple luminaires;  
the high-frequency power source being connected to and powered from a standard utility power line and having a high-frequency power output;  
the interconnecting cable being connected to said high-frequency power output;  
said interconnecting cable not being a track of a track lighting system;  
the interconnecting cable being supplied from a manufacturing facility with no luminaires connected thereto;  
the system further characterized in that multiple luminaires can be powered from the same interconnecting cable without severing the interconnecting cable; and  
during installation, luminaires are connected to a single interconnecting cable at multiple points along the interconnecting cable using an insulation-displacement connection.

64. (New) The luminaires described in claim 63, wherein the luminaires can be mounted in place prior to the connection to the interconnecting cable.
65. (New) The luminaires described in claim 63, wherein the interconnecting cable is installed in place under the cabinet or shelf before the luminaires are mounted in place under the cabinet or shelf.
66. (New) The luminaires described in claim 63, wherein the luminaires can be relocated along the interconnecting cable.
67. (New) The luminaires described in claim 63, wherein the luminaires can be connected to the interconnecting cable in any one of four possible orientations.
68. (New) The luminaires described in claim 63, wherein the luminaires have input terminals; and the input terminals have a flat cross-section.
69. (New) The luminaires described in claim 63, wherein the luminaires include a ballasting circuit capable of powering at least one gas-discharge lamp.
70. (New) The luminaires described in claim 69, wherein the at least one gas-discharge lamp is a single-ended gas-discharge lamp.
71. (New) The luminaires described in claim 69, wherein the ballasting circuit includes an arrangement capable of changing the power level provided to the at least one gas-discharge lamp.
72. (New) A method of providing under-cabinet lighting, comprising the steps of:  
mounting the ballasted socket assemblies to the under side of the cabinet or shelf,  
passing a high-frequency output cord along the bottom of a cabinet or a shelf,  
placing the high-frequency output cord within a channel provided in the ballasted socket assembly,

operating a mechanism that causes the ballasted socket assembly to make electrical contact with conductors within the high-frequency output cord.

73. (New) A method of providing under-cabinet lighting, comprising the steps of:  
attaching a reflector to a ballasted-socket assembly,  
mounting the ballasted socket assembly to the under side of the cabinet or shelf,  
passing a high-frequency output cord along the bottom of a cabinet or a shelf,  
placing the high-frequency output cord within a channel provided in the ballasted socket assembly,  
operating a mechanism that causes the ballasted socket assembly to make electrical contact with conductors within the high-frequency output cord.

74. (New) A method of providing under-cabinet lighting, comprising the steps of:  
positioning a reflector between a ballasted-socket assembly and the underside of a cabinet or shelf,  
mounting the ballasted socket assemblies to the under side of the cabinet or shelf  
passing a high-frequency output cord along the bottom of a cabinet or a shelf,  
placing the high-frequency output cord within a channel provided in the ballasted socket assembly,  
operating a mechanism that causes the ballasted socket assembly to make electrical contact with conductors within the high-frequency output cord.

75. (New) A method of providing under-cabinet lighting, comprising the steps of:  
orienting a ballasted-socket assembly in one of four possible orientations,  
mounting the ballasted socket assembly to the underside of the cabinet or shelf,  
passing a high-frequency output cord along the bottom of a cabinet or a shelf,  
placing the high-frequency output cord within a channel provided in the ballasted socket assembly,  
operating a mechanism that causes the ballasted socket assembly to make electrical contact with conductors within the high-frequency output cord.

76. (New) A method of providing under-cabinet lighting using gas-discharge lamps,  
comprising the steps of:  
mounting the ballasted socket assemblies to the under side of the cabinet or shelf,  
passing a high-frequency output cord along the bottom of a cabinet or a shelf,  
placing the high-frequency output cord within a channel provided in the ballasted socket  
assembly,  
operating a mechanism that causes the ballasted socket assembly to make electrical  
contact with conductors within the high-frequency output cord.